

**AMENDMENTS TO THE CLAIMS:**

This listing of Claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-32 (canceled)

Claim 33 (new):

A process for increasing the loading efficiency of trehalose into platelets comprising:

providing platelets having a first phase transition temperature range and a second phase transition temperature range which is greater than the first phase transition temperature;

disposing the platelets into a trehalose solution to commence loading trehalose into the platelets by uptaking trehalose from the trehalose solution by fluid phase endocytosis; and

heating the trehalose solution to the second phase transition temperature range to increase the loading efficiency of trehalose into the platelets.

Claim 34 (new):

The process of Claim 33 wherein said platelets comprise human platelets.

Claim 35 (new):

The process of Claim 33 wherein said second phase transition temperature range is greater than about 25° C.

Claim 36 (new):

The process of Claim 34 wherein said second phase transition temperature range is greater than about 25<sup>0</sup> C.

Claim 37 (new)

The process of Claim 35 wherein said second phase transition temperature ranges from a temperature greater than about 25<sup>0</sup> C to a temperature less than about 40<sup>0</sup> C.

Claim 38 (new)

The process of Claim 34 wherein said second phase transition temperature ranges from a temperature greater than about 25<sup>0</sup> C to a temperature less than about 40<sup>0</sup> C.

Claim 39 (new)

The process of Claim 37 wherein said temperature ranges from about 30<sup>0</sup> C to less than about 40<sup>0</sup> C.

Claim 40 (new)

The process of Claim 38 wherein said temperature ranges from about 30<sup>0</sup> C to less than about 40<sup>0</sup> C.

Claim 41 (new)

A process of preparing loaded platelets comprising:  
providing platelets selected from a mammalian species;  
and  
loading an oligosaccharide by fluid phase endocytosis into the platelets at a temperature greater than about 25<sup>0</sup> C to produce loaded platelets.

Claim 42 (new)

The process of Claim 41 wherein said loading comprises loading with an oligosaccharide solution.

Claim 43 (new)

The process of Claim 42 wherein said fluid phase endocytosis comprises uptaking external oligosaccharide from the oligosaccharide solution at the temperature greater than about 25° C.

Claim 44 (new)

The process of Claim 42 wherein said loading comprises incubating the platelets at the temperature greater than about 25° C with the oligosaccharide solution.

Claim 45 (new)

The process of Claim 41 wherein said loading is without a fixative.

Claim 46 (new)

The process of Claim 41 wherein said oligosaccharide comprises trehalose.

Claim 47 (new)

The process of Claim 41 wherein said loading of the oligosaccharide into the platelets is at a temperature ranging from greater than about 25° C to less than about 40° C.

Claim 48 (new)

The process of Claim 47 wherein said temperature ranges from about 30° C to less than about 40° C.

Claim 49 (new)

The process of Claim 47 wherein said temperature is about 37° C.

Claim 50 (new)

The process of Claim 41 wherein said platelets comprise human platelets.

Claim 51 (new)

Loaded platelets produced in accordance with the process of Claim 41.

Claim 52 (new)

Loaded platelets produced in accordance with the process of Claim 33.